

REMARKS

The foregoing Amendment and remarks which follow are responsive to the Office Action mailed October 4, 2004 in relation to the above-identified patent application. In that Office Action, the Examiner rejected Claims 16, 17, 21-26, 30, 31 and 35 under 35 U.S.C. Section 102(b) as being anticipated by the Lin et al. reference. Additionally, the Examiner rejected Claims 31 and 34 under 35 U.S.C. Section 102(e) as being anticipated by the Mostafazadeh et al. reference. Claims 23 and 24 were rejected under 35 U.S.C. Section 103(a) as being unpatentable over the combination of the Lin et al. reference and Applicant's purported Admitted Prior Art Figures 1 and 3. Importantly, the Examiner indicated that Claims 18-20, 27-29 and 32 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Summary of Claim Amendments:

By this Amendment, Applicant has cancelled Claims 18 and 27, and has amended Claims 16, 17, 19, 20, 22, 25, 26 and 28-32. More particularly, independent Claim 16 has been amended to incorporate the features originally set forth in cancelled Claim 18 which was objected to by the Examiner. Thus, amended Claim 16 recites at least two sets of leads extending along respective ones of the sides of the chip paddle, each set of leads including at least two outer leads and at least one inner lead disposed between the outer leads. As further recited in amended Claim 16, the bottom surfaces of the outer leads of each set are each of a first length, with the bottom surface of the inner lead of each set being of a second length which is unequal to the first length. Claims 17 and 22 have each been amended to make the language thereof consistent to that of amended Claim 16, with Claims 19 and 20 each being amended only to change their dependency to Claim 16.

Independent Claim 25 has been amended to include the features originally set forth in cancelled Claim 27 which was also objected to by the Examiner. Thus, amended Claim 25 recites at least two sets of leads extending along respective ones of the sides of the semiconductor chip in spaced relation thereto, each set of leads including at least two outer leads and at least one inner lead disposed between the outer leads. As further recited in

amended Claim 25, the bottom surfaces of the outer leads of each set are each of a first length, with the bottom surface of the inner lead of each set being of a second length which is unequal to the first length. Claims 26 and 30 have each been amended to make the language thereof consistent to that of amended Claim 25, with Claims 28 and 29 each being amended only to change their dependency to Claim 25.

Independent Claim 31 has been amended to include certain features from Claim 32 which was also objected to by the Examiner. Thus, amended Claim 31 recites the improvement as comprising the providing of at least two sets of the leads which are extended along respective ones of the sides of the semiconductor chip and each include at least two outer leads and at least one inner lead disposed between the outer leads. Claim 32 has been amended to make the language thereof consistent to that of amended Claim 31.

As is apparent from the foregoing, in each of amended Claims 16, 25 and 31, the semiconductor package is described as having at least two sets of leads which extend along respective ones of the sides of a chip paddle (in the case of Claim 16) or respective ones of the sides of a semiconductor chip (in the case of Claims 25 and 31). Additionally, in each of amended Claims 16, 25 and 31, each set of leads is described as including at least two outer leads and at least one inner lead which is disposed between the outer leads, the bottom surface of each of the outer leads of each set being of a first length, and the bottom surface of the inner lead of each set being of a second length which is unequal to the first length. Applicant respectfully submits that neither the Lin et al. nor Mostafazadeh et al. references cited by the Examiner in the latest Office Action teach or suggest at least these features of Claims 16, 25 and 31.

An Overview of the Cited Lin et al. Reference:

The Lin et al. reference discloses a semiconductor device comprising a pattern of conductive traces 13 which are originally patterned on one side of a transfer film 12. The conductive traces 13 as applied to the film 12 are shown in Figure 8 of the Lin et al. reference. In the completed semiconductor device 30 shown in Figure 5 of the Lin et al. reference, a semiconductor die 15 is attached to one of the traces 13 which serves as a chip paddle, with conductive wires 18 being used to electrically connect the semiconductor die 15 to other traces 13 which serve as leads.

Independent Claims 16 and 25 are not Anticipated by the Lin et al. Reference:

As is most apparent from Figure 8 of the Lin et al. reference, the conductive traces 13 serving as leads are not configured or arranged to define two distinct sets wherein the outer leads of each such set are each of a first length, with an inner lead of each such set disposed between the outer leads being of a second length which is unequal to the first length. Thus, Applicant respectfully submits that independent Claims 16 and 25 as amended are not anticipated by the Lin et al. reference, and are in condition for allowance, as are Claims 17, 19-24, 26 and 28-30 as being dependent upon respective allowable base claims.

An Overview of the Cited Mostafazadeh et al. Reference:

The Mostafazadeh et al. reference discloses a semiconductor device comprising a die attach platform 121 which is partially surrounded by leads 122 and bus bars 127. As is best seen in figures 2c-1 and 2d-1, an IC chip 110 is mounted to the die attach platform 121, and electrically connected to both the leads 122 and bus bars 127 through the use of wires 114.

Independent Claim 31 is not Anticipated by the Mostafazadeh et al. reference:

As is readily apparent from the Mostafazadeh et al. reference, the bus bars 127 do not extend between the outer leads 122 of either set thereof. Rather, as indicated above, each of the two bus bars 127 included in the semiconductor device extends linearly between one of the sides of the die attach platform 121 and the inner ends of all of the leads 122 of a respective one of the two sets thereof included in the semiconductor device. Thus, Applicant respectfully submits that independent Claim 31 as amended is not anticipated by the Mostafazadeh et al. reference and is in condition for allowance, as are Claims 32, 34 and 35 as being dependent thereon.

Application No.: 09/687,048
Attorney Docket: AMKOR-052RCE

Conclusion:

On the basis of the foregoing, Applicant respectfully submits that the stated grounds of rejection have been overcome, and that Claims 16, 17, 19-26, 28-32, 34 and 35 are now in condition for allowance. An early Notice of Allowance is therefore respectfully requested.

If any additional fee is required, please charge Deposit Account Number 19-4330.

Respectfully submitted,

Date: 11/4/05

By:



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